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CORRES. CONTROL
INCOMING LTR NO.

4367 RF 92



Department of Energy

ROCKY FLATS OFFICE
P.O. BOX 928
GOLDEN, COLORADO 80402-0928

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AUG 18 1992

EG&G
ROCKY FLATS PLANT 92-DOE-7096
CORRESPONDENCE CONTROL

ACTION	
DIST.	LTR ENC
BENJAMIN, A.	
BERMAN, H.S.	
BIRADY, J.A.	
BIRANCH, D.B.	
CARNIVAL, G.J.	
COPP, R.D.	
CORDOVA, R.C.	
DAVIS, J.G.	
EVERED, J.E.	
ERRERA, D.W.	
GOODWIN, R.	
HANNI, B.J.	
HEALY, T.J.	
HILBIG, J.G.	
DEKER, E.H.	
KERSH, J.M.	<input checked="" type="checkbox"/>
KIRBY, W.A.	
KRIEG, D.	
KUESTER, A.W.	
LEE, E.M.	<input checked="" type="checkbox"/>
MARX, G.E.	
MORGAN, R.V.	
PIZZUTO, V.M.	
POTTER, G.L.	
SANDLIN, N.B.	
SATTERWHITE, D.G.	
SCHUBERT, A.I.	
SHEPLER, R.L.	
SULLIVAN, M.T.	
SWANSON, E.R.	
TALAMAN, K.G.	
WILSON, J.M.	
ZANE, J.O.	

J. David Holm
Water Quality Control Division
Colorado Department of Health
4210 East 11th Avenue
Denver, Colorado 80220

Dear Mr. Holm;

This purpose of this letter is to reply to the questions raised in your May 20, 1992, letter related to elevated plutonium (Pu) values your laboratory received on Pond C-2 samples, and the status of the Pond C-2 recycle project.

Elevated Pu results on Pond C-2

During the last release of Pond C-2, your laboratory received a Pu result of 0.1003 pCi/L for a grab sample taken on April 7, 1992, which was the last day of discharge. This result differs from those we received for a split of the April 7 sample (0.010 ± 0.004 pCi/L), and a composite sample for the period of April 4 through 7 (0.018 ± 0.006 pCi/L). We do not know why our laboratories reported different results of the same sample (April 7), but feel confident in our value given the substantiated composite result. At that time, the pond level was at 14 percent full, and the water level was relatively closer to the sediment levels in the pond than before discharge began. A possible reason for the analytical discrepancy could be that a contaminated sediment particle may have been present in your sample.

However, as you know, CDH and the Department of Energy (DOE) also split monitoring samples from Pond C-2 on June 3, 1992. The CDH Pu result for that sampling was 0.180 pCi/L, and the result received by DOE was 0.126 ± 0.025 pCi/L. No discharge from Pond C-2 was taking place at that time, and the pond level was also at approximately 14 percent full. Additionally, sediment samples were taken on May 5, 1992, to assess Pu levels in anticipation of exercising the dam outlet valve of Pond C-2. The value received for Pu in the sediment was 4.4 pCi/g, which is well above the Colorado soil Pu construction standard of 0.9 pCi/g.

Because elevated Pu results have been seen at Pond C-2, and the Pu levels in the sediments appear to be high, DOE and EG&G have initiated studies to determine if the sediments, or solubilization of Pu in the sediments is the cause of these increased values. This summer, a study to investigate sediment resuspension and solubilization reactions at Pond C-2 is being conducted. Also, examination of soil contamination levels near Pond C-2, and analysis of soil transport mechanisms to ascertain the sources of the elevated Pu in the sediments are being done. Once the sources and mechanisms are better understood, the possibility of control actions can be investigated.

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Reviewed for Addressee
Corres. Control RFP
8-19-92

DATE BY
Ref. #

ADMIN RECORD

AUG 18 1992

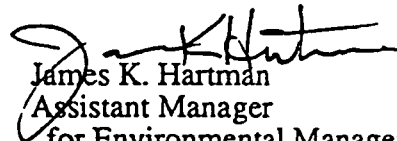
Mr. J. David Holm
92-DOE-7096

Pond C-2 Recycle Project

The original Pond C-2 recycle project was to consist of a temporary recycling system, an assessment of that system's effectiveness, and then construction of the permanent recycle network. Because of design delays, hold ups by different review groups, and concerns with cross-connection potentials to the plant raw water system, the recycle setup is not yet in place. Construction of a permanent Pond C-2 recycle system, incorporating a separate holding pond and distribution network to pipe C-2 water (and possibly a portion of Pond A-3 water) to the process water system, is currently under consideration by DOE. The recent decision by the Environmental Protection Agency to place pond management under the Comprehensive Environmental Response, Compensation, and Liability Act and the Resource Conservation and Recovery Act may further impede the project until an evaluation of the regulatory implications of the water transfer can be completed.

We hope this information is of value to you. We will update your staff on the status of the Pond C-2 studies, and the Pond C-2 recycle project as soon as more information is available. If you have any questions regarding the studies or recycle project, please feel free to contact me, or Mark Van Der Puy of my staff at 966-2473.

Sincerely,


James K. Hartman
Assistant Manager
for Environmental Management

cc:

T. Lukow, WMED, RFO
M. Van Der Puy, EMB, RFO
J. Dion, EMB, RFO
D. Hauser, FMMEB, RFO
F. Hobbs, SWD, EG&G
Judy Bruch, RFPU, CDH
Jeb Love, RFPU, CDH
R.M. Quillen, RCD, CDH
R. Shankland, EPA